1. **Introduction**

*The aim of philosophy, abstractly formulated, is to understand how things in the broadest possible sense of the term hang together in the broadest possible sense of the term.*

—Wilfrid Sellars

Philosophy is, in some ways, a fragmented discipline. Some of us investigate abstract topics in metaphysics. Some of us attempt to reach better understandings of the great works from eras past. Some of us do highly technical work in logic, formal epistemology, or philosophy of language. Some of us want no truck with the *a priori*, preferring research that is more informed by the empirical sciences. Some of us are primarily concerned with how we ought to treat one another and govern ourselves. And so forth.

This disparate collection of topics is united partly by historical and institutional accident, partly by methodology—whatever our differences, we share the demand for rigorous argumentation—and partly by the simple fact that they all ask very hard questions that other disciplines do not address. But there is at least one other theme that unites a surprising amount of philosophical inquiry. A certain kind of talk is ubiquitous in our field: talk of one phenomenon generating or giving rise to another… talk of one phenomenon being based in or constructed from another… talk of getting some thing, or property, or state of affairs, out of another. Philosophy is rife with such locutions.

Here are a few familiar examples of the theme. How do nonmoral properties give rise to moral ones, or normative ones more generally? How are the modal facts built out of the nonmodal ones? How does sentence-level meaning emerge from the meanings of the constituent expressions and the intentions of the speaker? How do intentions—and mental phenomena more generally—arise from neural phenomena, or physical facts more broadly? (Or do they not?) How are ‘ordinary middle-sized dry goods’, and the laws that govern their behavior, generated from the behavior of and laws that govern sub-atomic particles and fields?

Notice too that we don’t merely ask these questions about certain *kinds* of properties, facts, or laws—notably the mental, the modal, the moral, the ‘higher-level’—but also about

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1 I intend terms like ‘phenomenon’ and ‘entity’ to be neutral across ontological categories: objects, properties, relations, facts, laws….
things like properties, facts, and laws themselves. That is, we also ask these questions about entire ontological categories. Are individuals bundles of properties, or are properties classes of individuals? Are states of affairs somehow constructed from individuals, properties, and times? Or are states of affairs more fundamental, with individuals somehow abstracted from them? Are laws of nature just patterns in the Humean spread of ‘local matters of particular fact’? Or is some kind of primitive pushing and pulling also a constituent?

All of these are questions about what ‘gives rise to’ or ‘makes up’ another, or, to switch directions, about what some phenomenon is ‘based in’, ‘constructed from’, or ‘built out of’. We philosophers deploy an array of relations in answering such questions: grounding, composition, determination, realization, constitution, and others. I like to call these ‘building questions’ and ‘building relations’ respectively. Though that terminology is my own, the fact is that we talk about building all the time, and have been doing so as long as we have been doing philosophy at all. We do it whenever we claim that some entity or phenomenon can be accounted for in other terms, and also whenever we deny that it can be. Either way, we are making claims about what builds—or fails to build—what.²

I argue that there is a unified family of building relations, and articulate the central features they all share. One crucial shared feature is that they connect entities that are in some sense more fundamental to entities that are in some sense less fundamental. All building talk makes, and is intended by its users to make, claims about relative fundamentality.³ (Perhaps some relations have not lived up to that intention: supervenience, in particular, has failed (e.g. McLaughlin and Bennett 2005). But particular supervenience claims were always intended to state a relation of relative fundamentality and license ‘in virtue of’ talk.)

A variety of questions arise immediately. Just to get us started: what is the concept of fundamentality in play? Should we believe in it, or is it a dark notion to be banished despite the extent to which we implicitly rely upon it? Exactly how broad is the class of building relations?

² Note the centrality of building to Frank Jackson’s claim that metaphysics is fundamentally concerned with what he calls the “location problem”: “metaphysicians seek a comprehensive account of some subject-matter—the mind, the semantic, or, most ambitiously, everything—in terms of a limited number of more or less basic notions.... Metaphysics... acknowledges that we can do better than draw up big lists [and] seeks comprehension in terms of a more or less limited number of ingredients” (1998, 4).

³ The converse is not true: not all claims of relative fundamentality invoke a building relation. For example, the claim that lead atoms are more fundamental than toaster ovens is perfectly well-formed, and indeed true—despite the fact that—hopefully!— no lead atoms stand in any building relations to any toaster ovens. See chapters 2 and 4 for further discussion.
Do any unfold over time? Might causation be one? Does it make any sense to think of building relations as themselves built, or need we take them to be themselves fundamental?

This book is about building and these attendant issues: causing, creating, fundamentality. In chapter 2 I explain in more detail what it means to say that some relations ‘form a unified family’, and characterize the family of building relations more carefully. I also argue that the quite strong claim that there is a single most fundamental building relation, of which all others are versions or determinates, is more defensible than it might appear.

In chapter 3, I argue against the natural thought that building is noncausal determination. It is a mistake to think of ‘vertical’ determination as easily distinguished from ‘horizontal’ determination, because the building family is causally tainted in at least two ways. First, causation itself is properly counted as a building relation. Second, there are particular building relations that are partially defined in causal terms, and even building relations that only obtain diachronically, in virtue of causal facts.

In chapter 4, I investigate the nature of fundamentality. I argue that there are at least three nonequivalent notions in play in recent literature, two of which are intimately intertwined with the notion of building. This does not generate a vicious circle, but rather goes a long way towards demystifying fundamentality talk. That, indeed, is one of the central claims of the book: for one thing to be more fundamental than another in this sense is either for the first to at least partially build the second, or (roughly) for things relevantly like the first to at least partially build things relevantly like the second. I go on to investigate various related questions about fundamentality: the relation between absolute and relative fundamentality, the relation between singular and general claims of relative fundamentality, and whether anything is absolutely fundamental at all.

In chapter 5, I address a dilemma that arises about the ontological status of building relations themselves. There are reasons to think that none can be fundamental; I explore recent arguments to that effect by Theodore Sider and Jonathan Schaffer. Yet circularity or regress seems to threaten if all building relations are themselves built. This dilemma is a pressing one. Without a solution, we must reject building. But to claim that building never occurs, that nothing is built, is to claim that the world is flat—nothing is more fundamental than anything else. (This is a far, far stronger claim than compositional nihilism.) I clarify the various alleged puzzles, and argue that the claim that building is itself built need not lead to regress. Finally, in
chapter 6 I argue that it is not the case that the sole aim of metaphysics is to uncover the fundamental nature of reality (contra Sider, among others), nor even to also discover the facts about what builds what (contra Schaffer, among others). Metaphysics both is and should be about the nonfundamental as well. The same considerations that legitimize the special sciences also legitimize the metaphysics of (some) nonfundamentalia.

My title, Making Things Up, is obviously a pun. It is a nod to the fact that some people think that philosophers—or metaphysicians, at least—are in the business of inventing things out of whole cloth. Let me be clear that I myself do not think that; I am an unabashed metaphysical realist. But I nonetheless do think there is an interesting connection between imagination or invention and the kind of generation that is the topic of this book. In particular, I do not think it is entirely an accident that the same phrase can be used for both kinds of relation. That might seem strange; after all, surely the sense in which the Land of Oz is ‘made up’ (by L. Frank Baum) is quite different from the sense in which nonfundamental entities like tables or mental states are ‘made up’ (of their parts or realizers). Yet notice that many people are attracted to the idea that nonfundamental entities are less real than fundamental ones. For example, Schaffer thinks that grounded entities have a lesser “degree of reality” than their grounds (forthcoming, 7; see also Cameron 2008, 9-10). Kristopher McDaniel also defends the notion of “degrees of being”, and points out that the position is shared by historical luminaries like Plato and Descartes (ms). Kit Fine thinks that there is at least a “general presumption in favor of the grounded not being real” (2001, 27). And Sider has recently claimed that the existential quantifier applies only in an extended sense to nonfundamentalia (2011). Whether or not any of that is literally correct—I think it is not—the intuition behind it makes sense of the shared phrasing. In both uses, ‘made up’ indicates believed lesser ontological status.

At any rate, my goal in Making Things Up is not to, well, make things up. Rather, it is to investigate the nature of making things up—or, to revert to my preferred term, building. It should be noted at the outset that the level of generality at which I am aiming makes this a somewhat unorthodox philosophical project. Instead of making highly detailed claims about highly specific relations, I am pulling back to look at the bigger picture. We philosophers spend

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4 My metaphysical realism is consistent with the thought that some disputes might not be worth pursuing, and that some disputes might not be resolvable by the kinds of methods that metaphysicians typically use (see my 2009).

5 Admittedly, Schaffer does not quite mean ‘existent’ by ‘real’. He says that he intends ‘real’ to mean “‘substantial’ or ‘self-sufficient’ and to contrast with ‘dependent’” (forthcoming, 7).
a lot of our time precisifying and distinguishing, separating and untangling. There is nothing wrong with that. But occasionally something can be learned from lumping notions together rather than from pulling them apart. Sometimes it is good to zoom out rather than zoom in. I hope you will find it instructive. At the very least, I hope you will come to see the centrality of the notions of building and relative fundamentality to philosophical thinking, in much the way that Molière’s bourgeois gentleman learns—from his ‘maître de philosophie’—that he has been speaking prose his whole life without knowing it.